

IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF MICHIGAN

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MAGNA ELECTRONICS INC.	)	
	)	
Plaintiff,	)	
	)	Civil Action No. 13-cv-00324
v.	)	
	)	Honorable Paul L. Maloney
TRW AUTOMOTIVE HOLDINGS CORP.;	)	Honorable Joseph G. Scoville
TRW AUTOMOTIVE US LLC; and	)	
TRW VEHICLE SAFETY SYSTEMS INC.	)	
	)	
Defendants.	)	
_____	)	

**JOINT CHART DISCLOSING CLAIMS AND DEFENSES**

Pursuant to the Court's Case Management Order (Dkt. # 77) entered November 8, 2013, the parties jointly submit the following comprehensive chart of: (1) all claims of each patent-in-suit that plaintiff will contend at trial has been infringed; (2) all items that plaintiff accused of infringing each such claim and disclosing whether infringement is literal or by equivalents; (3) all reasons for non-infringement and defenses asserted by defendants in response to each charge of infringement. The undersigned representatives stipulate that the accompanying chart is an accurate response to the required disclosures.

**Plaintiff's Submission**

In the chart attached hereto the asserted patent claims have been applied element by element to the accused TRW Systems. This chart includes assertions of indirect infringement, including contributory infringement and inducement of infringement. Plaintiff alleges direct infringement (including joint infringement) and indirect infringement, including contributory infringement and inducement of infringement, by Defendants of all asserted claims.

The Chart has inserted reference letters solely to assist in the correlation of the claim elements to the TRW Systems. These references are not limitations or part of the claims and are not to be used for interpretation of the claims or determination of scope of the claims. To the extent that the same reference letter is used in different claims in association with different language, this does not mean and is not to be interpreted as indicating the same interpretation or scope is to be afforded the referenced terms, but is only to assist in correlating claim elements to TRW Systems.

The Chart references to Chart Attachments to assist in understanding the application to the TRW Systems. This reference to Chart Attachments is not exhaustive of evidence that supports application of the claims to the accused products, but is only indicative of that application, and different or additional proofs of infringement may be introduced at trial. Chart Attachment 1 is the article Video-based driver assistant systems with the TRW Scalable Camera, Georg Schneider and Gideon Stein (cited as “Schneider-Stein”), and Attachment 2 is the article Challenges and Solutions for Bundling Multiple DAS Applications on a Single Hardware Platform, Gideon P. Stein, Itay Gat, Gaby Hayon (cited as “Stein-Gat-Hayon”).

The asserted claims of the patents-in-suit of the Chart apply to any and all accessory systems, accessory module systems and/or accessory mounting systems utilizing versions of the TRW Scalable Camera or S-Cam, including without limitation the S-Cam TRW has referred to as the S-Cam 3 utilizing Mobileye EyeQ3 technology, as well as all versions prior to the S-Cam 3 such as the S-Cam 2 which utilizes Mobileye EyeQ2 technology. Magna asserts that Defendants infringe the identified claims directly and indirectly, including indirect infringement by contributory infringement and/or inducement of infringement, for which contributory infringement and/or inducement infringement the direct infringers, other than TRW itself,

include vehicle drivers and vehicle manufacturers (OEMs), the full extent of which are unknown at this time but which include at least General Motors vehicles (for example, the model year 2014 Chevrolet Silverado and model year 2014 GMC Sierra, each in current production, and General Motors program designation O2xx/E2xx/C1xx vehicles currently in development) and Chrysler Corporation vehicles (for example, model year 2014 Jeep Grand Cherokee and model year 2014 Jeep Cherokee, each in current production).

In each instance the application of the claim element to the TRW Systems is asserted to be literal. To the extent that it is argued there is not literal response to an element, the accused systems would represent an insubstantial change and therefore be an equivalent under the Doctrine of Equivalents.

#### **Defendants' Submission**

These disclosures are made according to TRW's current knowledge, understanding and belief as to the facts and information reviewed as of the date of this submission and in response to Magna's position on infringement as now identified in its submission of January 14, 2014, which Magna maintains remain its most updated contentions as of this date and the contentions as to claims it intends to pursue at trial. TRW reserves the right to amend its non-infringement arguments herein based on additional discovery, the Court's claim constructions, and the arguments put forth by Magna, including any arguments asserting the doctrine of equivalents. TRW also reserves the right to amend its invalidity arguments herein based on additional discovery, the Court's claim constructions, and any narrowing of claims.

Nothing in this submission should be understood or deemed to be an express or implied admission or contention with respect to the proper construction of any terms contained within the

asserted claims, and the contentions made in this submission are made in the alternative. TRW will offer its proposed claim constructions in accordance with the Case Management Order.

In addition, TRW reserves the right to assert additional prior art later discovered.

## DEFENSES

### I. NON-INFRINGEMENT

#### A. Failure to establish existence of each element of the claimed invention in the accused device – Applicable to all asserted Claims

Magna, as the plaintiff, bears the burden of showing infringement of each and every element of each and every claim it has asserted in this litigation. *Under Sea Industries, Inc. v. Dacor Corp.*, 833 F.2d 1551, 1557 (Fed. Cir. 1987) (“[t]he burden always is on the patentee to show infringement.”). To the extent Magna has failed to alleged the identity of the claimed element in either TRW accused products or products of third parties of whom Magna alleges TRW has contributed or induced infringement, TRW states that Magna has failed to meet its burden of proof and accordingly, TRW denies infringement. Responses to allegations of infringement are addressed in the attached charts. To the extent an element is alleged to be absent from proofs of infringement of one claim, it should generally be assumed to be alleged to be absent from proofs of all claims. Nothing, however, in the accompanying charts should be construed as either an admission that any claim element is found in the accused products, or as any indication that the burden of showing infringement of each claim of each patent can or should shift to TRW. Generally, Magna has not identified any conduct under 35 U.S.C. sec. 271(a), (b), or (c), including requisite knowledge or intent, nor taken discovery of entities it alleges to be direct infringers, nor identified such direct infringers with specificity.

**B. Failure to allege indirect (inducement or contributory) infringement – Applicable to all asserted Claims**

Magna's infringement charts rely on: (1) a paper from 2010 discussing the *concept* of the S-Cam product, a product that was still years away from delivery, (2) a third-party (Mobileye) paper discussing its technology from 2008, and (3) numerous photographs primarily of third-party automotive components like trim and brackets, and third party vehicles, which provide no explanation as to why TRW is responsible for the conduct of those third parties. In short, Magna's infringement allegations make no attempt to meaningfully address the actual objects of its accusations.

Specifically, despite the fact that nearly every claim contains a limitation such as a "vehicle," "windshield," or other necessary element which is provided only by vehicle manufacturers and not TRW, Magna has not identified a single act by such a vehicle manufacturer which would constitute direct infringement. Nor has Magna, in the over one year this case has been pending, made any attempt to seek third-party discovery from any such entity.

Magna has not identified any basis for any claim that there has been any active inducement by TRW of any infringement by any other party. Magna has also not identified any accused product argued to be a material part of an invention known to be especially made or adapted for use in infringement, and not a staple article or commodity of commerce suitable for substantial non infringing use. Magna has also failed to prove, or even meaningfully allege, the knowledge and intent requirements of infringement under either of 35 U.S.C. § 271(b) or (c).

**C. No Doctrine of Equivalents – Applicable to all asserted Claims**

Magna has failed to articulate any viable claim of infringement under the Doctrine of Equivalents. To show infringement under the Doctrine of Equivalents, a patentee must show that the Doctrine applies on an element-by-element basis. *Warner Jenkinson Co., Inc. v. Hilton*

*Davis Chemical Co.* 520 U.S. 17 (1997). “Each element contained in a patent claim is deemed material to defining the scope of the patented invention, and thus the doctrine of equivalents must be applied to individual elements of the claim, not to the invention as a whole.” Magna, instead, has relied on the defunct “overall” standard of identity of function, way, result or insubstantial differences. *Id.* (“[T]he accused device or process must be more than ‘equivalent’ overall”). Even if Magna were to assert equivalence on an element-by-element basis, which it has not done, such an assertion would run afoul of (1) the prohibition on regaining claim scope lost under the doctrine of Prosecution History Estoppel, (2) the prohibition that a theory of equivalence may not vitiate a claim element, and (3) the prohibition that the doctrine of equivalents may not be used to ensnare claim scope anticipated by or obvious under the prior art. Specifically with respect to prosecution history estoppel and with respect to any claim amendments made in the prosecution history of the asserted claims, Magna has failed to meet or attempt to meet its “burden of showing that the amendment does not surrender the particular equivalent in question.” *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.*, 535 U.S. 722, 740 (2002).

## **II. INVALIDITY FOR DOUBLE PATENTING / OBVIOUSNESS TYPE DOUBLE PATENTING**

The asserted claims of U.S. Patents Nos. 7,533,998; 8,179,437; 8,405,726; 8,508,593 and 8,531,278 are invalid for double patenting and/or obviousness-type double patenting. Each of those patents would otherwise at a date beyond when they would have otherwise expired but for the patentee’s unusual conduct of changing its claimed priority date. The claims of these patents are patentably-indistinct from earlier-expiring claims obtained by Magna and its predecessors. A representative chart is attached hereto providing examples of the many

elements of the patents given above claiming elements and scope contained in prior expiring patents.

### **III. INVALIDITY DUE TO PRIOR ART**

#### **A. Invalidity under 35 U.S.C. sec. 102(a), 102(b), 102(e), 102(g)(2)**

TRW identifies the patents, publications, prior art products and demonstrated materials and demonstrations referenced or incorporated by reference in its Initial Disclosure of Prior Art, and incorporates those items by reference herein. The claims asserted by Magna are invalid under 35 U.S.C. sec. 102, including sections 102(a), 102(b), 102(e), 102(g)(2) based upon that prior art. By way of illustration and example, and without limitation to the specific examples recited therein, TRW submits the attached charts showing the claimed features in the prior art. While TRW has provided citation to various pages, figures and sections of the listed art for convenience, TRW notes that the claimed element may be found additionally elsewhere in the prior art—such as figures or text depicting or describing same or similar elements—or through inherency. As such, the various pinpoint citations are not intended to convey the impression that the claimed element is found only at the cited point.

Furthermore, where a prior art reference is included in the attached charts for a particular claim, that reference should be considered to apply to all claims that depend from that particular claim, and to all claims that share one or more claimed elements or features with that particular claim.

A number of prior art references describe aspects of or refer to the Eureka Prometheus project, which was ongoing at least within the time period of 1987-1995 (“Prometheus”). Prometheus is prior art to one or more asserted claims under one or more of 35 U.S.C. §§ 102(a), 102(b), 102(e), and 102(g)(2), as evidenced by at least Ritter, Nguyen, Collision Avoidance

1989, Collision Avoidance 1990, Neural Networks Application, Speed Over Ground, Advanced technologies, *Improved Obstacle Detection by Sensor Fusion*, Neural Aspects, Action planning, Collision Warning, Intelligent Autonomous, Dickmanns 1990, Dickmanns 1991, Dickmanns 1992, and Robot Car Video.

**B. Invalidity under 35 U.S.C. sec. 103(a)**

Regarding TRW's allegations of obviousness, TRW notes that the U.S. Supreme Court addressed the test for obviousness under 35 U.S.C. § 103 in *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727 (2007), rejecting the Federal Circuit's rigid "teaching, suggestion, or motivation" requirement in favor of a flexible, functional approach in which an explicit finding of a "motivation" to combine prior art references is not required to establish obviousness. The Supreme Court held that it is sufficient that a combination of elements was "obvious to try" holding that, "[w]hen there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp." *Id.* at 1742. TRW contends as a general matter that, among other things, given the anticipated design requirements and state of the art of forward-facing camera-based driver assistance systems at the time the alleged inventions were reduced to practice, it would have been (and indeed was) obvious for one of skill in the art to make a forward-facing camera-based driver assistance system as required by the Asserted Claims. TRW also contends that one of skill in the art, at the time the alleged inventions were made, would have been motivated to combine the references disclosed herein in such a way as to reach the alleged inventions. The teaching, suggestion, or motivation to combine these references, although not required, is found, explicitly or implicitly, in one or more of the following:



1. His or her own knowledge or common sense;
2. The prior art references themselves and/or the prior art as a whole;
3. The interrelated teachings of multiple prior art references;
4. The subject matter acknowledged as prior art in the asserted patents;
5. The nature of the problems to be solved and the existence of similar improvements in similar applications;
6. Design incentives and other market forces, including the advantages of creating a product that was more desirable in one or more aspects, and the effects of demands known to the design community or present in the marketplace;
7. The ability to implement the alleged invention as a predictable variation of the prior art;
8. That application of known substitutes of one prior art element for another to obtain a predictable result;
9. Improvements in similar devices;
10. Any needs or problems known in the field and addressed by the asserted patents;
11. The number of identified, predictable solutions to the problems addressed by the asserted patents;
12. The references have the same named Inventor(s);
13. The references have the same Assignee(s) named on their respective faces;
14. The references belong to the same International Classification(s);
15. The references belong to the same U.S. Classification(s);
16. The references belong to the same the same Field(s) of Search;
17. The primary reference cites the secondary reference on its face, or vice versa;
18. At least one named Inventor of the primary reference is a named Inventor of one or more of the references cited on the face of the secondary reference, or vice versa;
19. Both references cite the same prior art as on their respective faces;
20. Both the patents solve the same problem;

21. The ability to implement the invention described in primary reference is a predictable variation of the invention disclosed in the secondary reference, or vice versa; and

The above-identified examples are merely illustrative of the various motivations to combine and are not intended to provide an exhaustive list of every possible motivation which may apply. In addition, for any claim elements that the court finds to be missing from the prior art, it would have obvious to have modified the design of that element or to have exchanged the design of that element with alternative designs for the same reasons as listed above.

#### **IV. INVALIDITY UNDER 35 U.S.C. § 112**

The patents in suit are invalid as failing to comply with 35 U.S.C. sec. 112(a), failing to contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention.

The claims of the patents in suit are also invalid for failing to comply with 35 U.S.C. sec. 112(b), failing to particularly point out and distinctly claim the subject matter of the invention. For example, each asserted claim is drafted in terms of functionality. That is, the claims are drafted in terms of what the purported invention does, rather than what it is. Such claims are indefinite in that they fail to differentiate the manner of performing such a function from the prior art, and fail to notify a skilled artisan what enabled methods of performing the claimed function are claimed and which are not. The claimed elements, being insolubly ambiguous and not amenable to any supported construction, are therefore indefinite. Claims containing indefinite limitations are invalid.

Claim terms lacking the requisite support and written description and/or failing to point out and distinctly claim the subject matter are given in the accompanying chart (Column 5: Defendants' 35 U.S.C. sec 112 Invalidity Defenses) of sec. 112 defenses.

**V. INVALIDITY UNDER 35 U.S.C. § 101**

The Asserted Patents are invalid under 35 U.S.C. § 101 for lack utility. The claims of the Asserted Patents, as written, merely recited the mounting of prior art apparatus to prior art fixture points attached to prior art circuitry. No claim is made as to the specific or substantial utility of the myriad combinations of prior art elements claimed. Rather, Magna's claims appear to be the embodiment of a strategy to simply claim as many combinations of elements found (or not found) in the patent disclosure with the purpose of maximizing allowed claims.

The Asserted Patents are invalid under 35 U.S.C. § 101 for statutory double patenting for claiming the same invention. Further, all of the Asserted Patents are invalid for nonstatutory double patenting because the claims are not patentably distinct from other, earlier expiring claims. Nonstatutory double patenting is a judicially created doctrine rooted in public policy (a policy reflected in the statute) so as to prevent the unjustified timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. Magna’s earliest priority date (at least as given on the face of the patents) for the Asserted Patents dates back to 1998. However, other Asserted Patents claiming the same or patentably indistinct subject matter have priority dates (at least as given on the face of the patents) as late as 2003. Further, for at least some of the Asserted Patents, Magna has improperly failed to disclose earlier priority history than what is reflected on the face of the patent. The effect of this conduct by the patentee was to attempt to obtain an extension in patent term by inclusion of only slight variations or alternative combinations of elements which had already been claimed. Magna alleges, in its infringement contentions, that the same conduct which infringes the later-expiring patents also infringes the earlier-expiring patents. As such, it cannot now claim that the claims of its later-to-expire patents do not coincide in scope with and cover the earlier-expiring patents.

Moreover, Magna has been claiming the same or patentably indistinct subject matter in other applications claiming priority as far back as 1993. Patents issued on such applications that claim priority back to 1993 (and patents claiming the same or patentably indistinct subject matter) have already expired. The claims of the Asserted Patents are not patentably distinct because they are anticipated by, or would have been obvious over, earlier expiring patents (including other Asserted Patents). The Asserted Patents are invalid for double patenting based on earlier expiring patents (including other Asserted Patents) containing similar subject matter in the disclosures and identical and/or patentably indistinct claims that were filed by the same inventive entity, different inventive entities having a common inventor, and/or are owned by a common assignee.

The patents in suit impermissibly mix the claimed classes of invention of 35 U.S.C. § 101. Specifically, the claims of the asserted patents purportedly describe machine, system, and apparatus inventions, but impermissibly include process and or method steps. Including process steps within such claims violates section 101's delineation of statutory invention classes, which are described only in the alternative.

The claimed inventions further lack utility. The claims, as written, merely recited the mounting of prior art apparatus to prior art fixture points attached to prior art circuitry. No claim is made as to the specific or substantial utility of the myriad combinations of prior art elements claimed. Rather, Magna's claims appear to be the embodiment of a strategy to simply claim as many combinations of elements found (or not found) in the patent disclosure with the purpose of maximizing allowed claims.

To the extent the claims include a human being in the claims, such as a person assembling a claimed apparatus or a viewer, such elements violate the prohibition against claiming human beings in a patent claim.

**VI. MISUSE**

TRW's Eighth Affirmative Defense (Patent Misuse) (which has been filed under seal) is incorporated by reference as if stated herein in its entirety to avoid the need for additional leave for under seal filing.

**VII. PROSECUTION HISTORY LACHES**

Several of Magna's patents in suit all originate with a filings of either January 31, 2003, August 25, 1999, January 7, 1998, or December 16, 1998 which the patentee claimed to the United States Patent and Trademark Office to support at least one claim of the eight patents in suit. Yet the patentee did not claim the inventions it now asserts TRW to infringe until 2007 at the earliest, and in fact has continued to file claims long after commencing this litigation. The patentee did not offer any explanation for this incredible delay. Magna contends that TRW's first generation products were released in 2008. 12-cv-654 Dkt. # 71 at 7. Yet Magna did not serve its complaint alleging infringement until the end of 2012. During the period of delay—and indeed, prior to the patentee's earliest claimed priority date—TRW and its predecessors invested in, worked on, used and developed technology which Magna now claims to be infringing. TRW has been prejudiced by the patentee's delay at least by virtue of Magna's threats in this lawsuit, by the patentee's extension of patent term, and by Magna's ongoing prosecution and assertion of claims which it did not file until long after the introduction of TRW products, denying TRW the opportunity to design around or otherwise avoid accusations of infringement—though

unfounded—and accompanying litigation expenses. As such, at least the claims the patents in this case are unenforceable.

**VIII. NO ENTITLEMENT TO PATENT TERM ADJUSTMENT**

U.S. Patents Nos. 8,179,437 and 8,531,278 are not entitled to the patent term adjustment of 418 days provided under 35 U.S.C. §154, as the patentee failed to engage in reasonable efforts to conclude prosecution of the application from at least the date the patentee claims that the alleged invention was disclosed until the date the application leading to those patents were actually filed.

**IX. DAMAGES DEFENSES**

As stated in TRW's Answer, Affirmative Defenses, and Counterclaims, any claim by Magna for damages is limited under 35 U.S.C. §§ 271, 286, 287, and/or 288.

Magna is barred under 35 U.S.C. § 286 from recovering damages for acts occurring more than six years prior to the date of the filing of the Complaint or Amended Complaint.

Magna is barred by 35 U.S.C. § 288 from recovering costs associated with its action.

**X. EQUITABLE DEFENSES**

Magna's claims are barred by the doctrine of Laches since TRW and its predecessors has been involved in public development and demonstration of the allegedly patented technology long before the service of the complaint with an unreasonable delay by Magna in bringing suit. Magna contends that TRW's first generation products were released in 2008. 12-cv-654, Dkt. # 71 at 7. In fact, TRW predecessors were involved in public demonstrations of the alleged inventions of the patents in suit prior to the date Magna claims they were invented.

Magna's claims are barred by the principles of equity for at least its long delay in bringing suit, its long delay in filing its claims with the Patent Office, its numerous and repeated

claims of subject matter for which it has no support, and its repeated attempts to achieve an unjustified time-wise extension of its patents.

**XI. EQUITABLE ESTOPPEL**

Magna's claims are barred by estoppel for at least its long delay after its earliest letters referencing its "patent estate." Magna's conduct, silence—especially when requested to specify whether it alleged infringement of any TRW product—and acquiesce in TRW and its predecessors' public development, demonstration, and introduction of products misled TRW to reasonably believe that its conduct was non infringing and that Magna did not intend to pursue further action. TRW relied upon that conduct and will now be enormously prejudiced if Magna proceeds with its claim, by at least Magna's claims of damages, injunction, comments to suppliers, customers, and the industry, and litigation costs.

**XII. SIXTH AFFIRMATIVE DEFENSE**

TRW's Sixth Affirmative Defense (which has been filed under seal) is incorporated by reference as if stated herein in its entirety to avoid the need for additional leave for under seal filing.

**XIII. USE BY U.S. GOVERNMENT**

Magna's claims are barred by 28 U.S.C. § 1498 to the extent its claims of infringement encompass use by the United States government, its employees, agents, contractors, subcontractors, and any person, firm, or corporation for the Government and with the authorization or consent of the Government.

Magna is also barred from recovering damages for its failure to mark patented articles under 35 U.S.C. § 287, and its failure to give notice of infringement before the service of the Complaint or Amended Complaint in this action.

**XIV. INEQUITABLE CONDUCT**

While TRW is not presently alleging inequitable conduct pending further discovery, TRW states that it reserves the right to do so upon discovery of relevant evidence. TRW identifies Magna's conduct of presenting an excessive and unexplained number of continuation applications, each with excessive claims, to the United States Patent and Trademark Office in an effort to minimize substantive examination of such claims, and the patentee's inconsistent claiming of priority dates as evidence of an intent to procure allowances on an early priority date which the patentee knew did not support its claims, and then reverting to a later priority date after obtaining several allowances from the United States Patent and Trademark Office.

To the extent TRW identifies further acts such as non-citation / concealment from the patent office of relevant prior art, TRW will seek appropriate leave to add such allegations to the complaint.

Respectfully jointly submitted,

/s/ Terence J. Linn

Terence J. Linn (P-33449)  
Karl Ondersma (P-68028)  
Gardner, Linn, Burkhardt & Flory, LLP  
2851 Charlevoix Drive SE, Suite 207  
Grand Rapids, Michigan 49546  
(616) 975-5500  
linn@glbf.com  
ondersma@glbf.com

*Attorneys for Plaintiff Magna Electronics Inc.*

/s/ Allan J. Sternstein

Allan J. Sternstein  
Timothy K. Sendek  
Michael S. Golenson  
LATHROP & GAGE LLP  
155 N. Wacker Drive  
Suite 3050  
Chicago, IL 60606  
Phone: 312-920-3300  
Fax: 312-920-3301  
ASTERNSTEIN@LATHROPGAGE.COM  
TSENDEK@LATHROPGAGE.COM  
MGOLENSEN@LATHROPGAGE.COM

Mark J. Magyar  
DYKEMA GOSSETT PLLC  
300 Ottawa Ave., N.W.  
Suite 700  
Grand Rapids, MI 49503  
Phone: 616-776-7500



Fax: 616-776-7573  
mmagyar@dykema.com

*Attorneys for Defendants TRW Automotive  
Holdings Corp.,  
TRW Automotive US LLC, and  
TRW Vehicle Safety Systems Inc.*

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